ENVIRONMENTAL CHEMISTS

Date of Report: 08/13/98 Date Received: 07/30/98

Project: Metro Self Monitor, PO# M11854

Date Samples Extracted: 08/11/98 Date Extracts Analyzed: 08/12/98

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	Nickel	Zinc
M11854	0.71	0.45	0.86	0.1
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 08/13/98 Date Received: 07/30/98

Project: Metro Self Monitor, PO# M11854

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 808021-01 (Duplicate)

			Andri Avida (Relative	
	Reporting	Sample	Duplica	te Percent	Acceptance
Analyte	Units	Result	Result	Difference	e Criteria
Chromium	mg/L (ppm)	0.58	0.72	22vo	0-20
Copper	mg/L (ppm)	0.29	0.32	10	0-20
Nickel	mg/L (ppm)	0.56	0.61	9	0-20
Zinc	mg/L (ppm)	< 0.05	< 0.05	nm	0-20

Laboratory Code: 808021-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recover	y % Recovery	Acceptance	•
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	5	0.58	86	106	80-120	21vo
Copper	mg/L (ppm)	5	0.29	97	91	80-120	6
Nickel	mg/L (ppm)	10	0.56	90	93	80-120	3
Zinc	mg/L (ppm)	5	< 0.05	87	90	80-120	3

Laboratory Code: Laboratory Control Sample

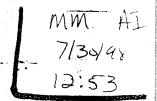
	Reporting	Spike	% Recover	y % Recove	ery Acceptance	e gradina (Alika)	
Analyte	Units	Level	LCS	LCSD	Criteria	RPD	111.41
Chromium	mg/L (ppm)	5	103	101	80-120	2	
Copper	mg/L (ppm)	5	97	97	80-120	0	
Nickel	mg/L (ppm)	10	102	101	80-120	1	
Zinc	mg/L (ppm)	5	99	99	80-120	0	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

vo - The value reported fell outside the control limits established for this analyte.

807139

RHEDMAN & BRUYA, INC. 2012 16th Avenue West Scattle, WA 98119-2029 12001 285-8282



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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 13, 1998

DUPLICATE COPY

INVOICE #98ACU0813-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M11854: Results of testing requested by Gerry Thompson for material submitted on July 30, 1998.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample

\$ 65.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 13, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on July 30, 1998 from your Metro Self Monitor, PO# M11854 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0813R.DOC